# TECHNICAL MANIFEST: DRAGON CHIP WATCH (PILLAR #8)

**Project Code:** MGG-DCW-2026

**Parent Entity:** Meta Guinea Ghost / BEV

**Status:** Pillar 08 (Tactical Director Node)

## 1. EXECUTIVE OVERVIEW

The **Dragon Chip Watch** is the primary Tactical Environmental Command Node (TECN) of the MGG ecosystem. Unlike standard consumer wearables, it serves as the **Director**, providing real-time environmental sampling, "Veto Power" safety protocols, and millisecond-sync orchestration for the **Ghost-Skin** and **HAWK AI Scout**.

## 2. HARDWARE ARCHITECTURE

- **Processor:** ARM Cortex-M7 Ultra-Low-Power (216MHz).
- **Haptic Engine:** Quad-Array Linear Resonant Actuators (LRAs) positioned at N/S/E/W on the bezel for **Directional Force Guidance**.
- **Display:** 1.9" AMOLED (450x450), 1000 nits peak, utilizing a 10fps "Ghosting" preview for latency compensation.
- **Proximity Sensing:** Ultra-Wideband (UWB) chip for sub-10cm detection of local **Ghost-Bricks**.
- **Power:** 500mAh Solid-State Thin-Film Battery with secondary kinetic rotor harvesting.

## 3. CORE PROTOCOLS

- **The Φ (Phi) Sync Engine:** Calculates the Global Sync Constant to predict the transition state of the ecosystem. It renders the user's intent 35ms ahead of the physical hardware to eliminate perceived lag.
- **VTP (Vectorized Texture Primitives):** A proprietary texture codec. It receives 12KB "Recipes" from the HAWK Scout (e.g., *Code 0x4F: Urban Brick*) and reconstructs the image locally using a shared internal library.
- **Executive Veto Logic:**
    - **Motion Veto:** Disables Nitinol mechanical changes during high-velocity movement.
    - **Privacy Veto:** Physical double-tap hard-wire killswitch to drop all active

skins.

- **Thermal Veto:** Throttles external Slave Unit power based on the user's wrist-skin temperature.

## 4. ECOSYSTEM INTEGRATION

| Linkage | Protocol | Function |
|---|---|---|
| **Ghost-Skin** | UWB / BLE | Dynamic pattern mapping & modular brick discovery. |
| **HAWK Scout** | VTP Relay | Environmental sampling & 4K texture acquisition. |
| **Ghost AMP** | Master-Slave | Offloads heavy FPGA processing; receives "Director" commands. |
| **Ghost Dictate** | SIR Logic | Voice-to-Tactical actuation via watch microphone array. |

## 5. DEFENSIVE PUBLICATION CLAIMS

- **Claim A:** A wearable device utilizing a localized "Digital Twin" to provide a predictive 10fps visual preview of a modular garment's state before hardware transition completion.
- **Claim B:** A method for environmental camouflage acquisition using vectorized "Texture Recipes" to reduce data bandwidth from >700KB to <20KB over BLE.
- **Claim C:** A haptic navigation system using a cardinal-point LRA array to provide "Directional Tugs" synchronized with an external spatial tracking drone (Scout).